SUBJECT INDEX

Acetate

Inhibition of Acetate Methanogenesis by Phenols, Yi-Tin Wang, H. David Gabbard and Pin-Chieh Pai, EE July/Aug. 91, p487-500.

Acid mine water

Kinetics of Manganese(II) Oxidation with Chlorine, Oliver J. Hao, Allen P. Davis and Peter H. Chang, EE May/June 91, p359-374.

Acidic water

Acidification Potential of Snowpack in Sierra Nevada, Carl W. Chen, Luis E. Gomez and Lanny J. Lund, EE July/Aug. 91, p472-486.

Limestone Contactors: Steady-State Design Relationships, Raymond D. Letterman, Marwan Hadad and Charles T. Driscoll, EE May/June 91, p339-358.

Activated carbon

Aerobic Biological Regeneration of Dichloromethane-Loaded Activated Carbon, Joachim Holst, Burkhard Martens, Holger Gulyas, Norbert Greiser and Ivan Sekoulov, EE Mar./Apr. 91, p194-208.

Evaluating Capacities of GAC Preloaded with Natural Water, Thomas F. Speth, EE Jan./Feb. 91, p66-79.

Activated carbon filters

Effect of Biofilm Accumulation on Colloid Cohesion, Bruce E. Rittmann and Steven A. Wirtel, EE Sept./Oct. 91, p692-695.

Activated carbon treatment

Evaluating Capacities of GAC Preloaded with Natural Water, Thomas F. Speth, EE Jan./Feb. 91, p66-79.

Evaluation of BAT for VOCs in Drinking Water, Robert M. Clark and Jeffrey Q. Adams, EE Mar./Apr. 91, p247-268.

Activated sludge

Clarifier-Sludge-Blanket Behavior at Industrial Activated-Sludge Plant, Blaine F. Severin, EE Nov./Dec. 91, p718-730.

Electricity Use in Small Wastewater Treatment Plants, Dirk F. Young and Ben Koopman, EE May/June 91, p300-307.

Steady-State Analysis for Biological Treatment of Inhibitory Substrates, Say Kee Ong and Alan R. Bowers, EE Nov./Dec. 90, p1013-1028.

Adsorption

Aerobic Biological Regeneration of Dichloromethane-Loaded Activated Carbon, Joachim Holst, Burkhard Martens, Holger Gulyas, Norbert Greiser and Ivan Sekoulov, EE Mar./Apr. 91, p194-208.

Evaluating Capacities of GAC Preloaded with Natural Water, Thomas F. Speth, EE Jan./Feb. 91, p66-79.

GAC Adsorber Design for Removal of Chlorinated Pesticides, Massoud Pirbazari, Badri N. Badriyha and Richard J. Miltner, EE Jan./Feb. 91, p80-100.

Modified Solution of Homogeneous Surface Diffusion Model for Adsorption, Edward H. Smith, EE May/June 91, p320-338.

Aeration

Dynamic Surface Tension Effects on Oxygen Transfer, Gail K. Masutani and Michael K. Stenstrom, EE Jan./Feb. 91, p126-142.

Evaluation of BAT for VOCs in Drinking Water, Robert M. Clark and Jeffrey Q. Adams, EE Mar./Apr. 91, p247-268.

Indexing Gas Transfer in Self-Aerated Flows, John S. Gulliver, John R. Thene and Alan J. Rindels, EE May/June 90, p503-523.

Water-Quality Impact Assessment for Hydropower, Ekaterini I. Daniil, John Gulliver and John R. Thene, EE Mar./Apr. 91, p179-193.

Aggregates

Clay-Blended Sludge as Lightweight Aggregate Concrete Material, Joo-Hwa Tay, Woon-Kwong Yip and Kuan-Yeow Show, EE Nov./Dec. 91, p834-844.

Air pollution

Prediction of CO Level Near Vehicular Tunnel with Waiting Queue, W. K. Chow, EE Jan./Feb. 91, p116-125.

Air stripping

Evaluation of Cascade Air Stripping—Pilot-Scale and Prototype Studies, N. Nirmalakhandan, Won Jang and Richard E. Speece, EE Nov./Dec. 91, p788-798.

Air water interactions

Influence of Waves on Air-Water Gas Transfer, Ekaterini I. Daniil and John S. Gulliver, EE Sept./Oct. 91, p522-540.

Algae

Dissolved Oxygen Variations in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu, Y. K. Cheung and P. P. S. Wong, EE Nov./Dec. 91, p799-815.

Forecasting of Dissolved Oxygen in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu and Y. K. Cheung, EE Nov./Dec. 91, p816-833.

Alums

Chemical Dosing of Small Water Utilities Using Regression Analysis, Glenn W. Ellis, Anthony G. Collins, Xi Ge and Catherine R. Ford, EE May/June 91, p308-319.

Anaerobic processes

Methanogenic Biotransformation of Chlorinated Hydrocarbons in Ground Water, M. Yavuz Corapcioglu, M. Akhter Hossain and M. Akram Hossain, EE Jan./Feb. 91, p47-65.

Analysis

Modeling Solute Transport by Centrifugation, Jay A. Celorie, Ted S. Vinson, Sandra L. Woods and Jonathan D. Istok, EE May/June 89, p513-526.

Anemometers
Turbulence Intensity of Mixing in Relation to Flocculation, Gordon L. McConnachie, EE Nov./Dec. 91, p731-750.

Anion exchange
Acidification Potential of Snowpack in Sierra Nevada, Carl W. Chen, Luis E. Gomez and Lanny J. Lund, EE July/Aug. 91, p472-486.

Application methods
Robust Optimal Design for Wastewater Treatment. Part II: Application, James G. Uber, John T. Pfeffer and E. Downey Brill, Jr., EE July/Aug. 91, p438-456.

Aquatic environment
Dissolved Oxygen Variations in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu, Y. K. Cheung and P. P. S. Wong, EE Nov./Dec. 91, p799-815.

Forecasting of Dissolved Oxygen in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu and Y. K. Cheung, EE Nov./Dec. 91, p816-833.

Aquatic habitats
Dissolved Oxygen Variations in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu, Y. K. Cheung and P. P. S. Wong, EE Nov./Dec. 91, p799-815.

Forecasting of Dissolved Oxygen in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu and Y. K. Cheung, EE Nov./Dec. 91, p816-833.

Aquatic plants
Vegetated Submerged Beds with Artificial Substrates. I: BOD Removal, Peter S. Burgoon, Thomas A. DeBusk, K. R. Reddy and Ben Koopman, EE July/Aug. 91, p394-407.

Vegetated Submerged Beds with Artificial Substrates. II: N and P Removal, Peter S. Burgoon, K. R. Reddy, Thomas A. DeBusk and Ben Koopman, EE July/Aug. 91, p408-424.

Ashes
Clay-Blended Sludge as Lightweight Aggregate Concrete Material, Joo-Hwa Tay, Woon-Kwong Yip and Kuan-Yeow Show, EE Nov./Dec. 91, p834-844.

Assimilation
Toxicant-Loading Concept for Organic Contaminants in Lakes, Steven C. Chapra, EE Sept./Oct. 91, p656-677.

Backwashing
Effect of Solids Property on Rates of Solids Dislodgment, Jerry Y. C. Huang and Javier Basagoiti, EE Jan./Feb. 89, p3-19.

Baffles
Internal-Wave Action in Gravity Clarifier, Lionel Catalan, Eva Ulrich, Robert R. Hudgins and Peter L. Silveston, EE July/Aug. 91, p457-471.

Basins
Designing Treatment Basin Dimensions to Reduce Cost, F. Douglas Shields, Jr. and Edward L. Thackston, EE May/June 91, p381-386.

Beaches
Investigation of Beach Contamination Using Tracer, Carl W. Chen, Luis E. Gomez, Ching L. Chen and D. Bruce Jacobsen, EE Jan./Feb. 91, p101-115.

Biochemical oxygen demand
Preliminary Optimal Design Model for Wastewater Treatment Plant, Okitsugu Fujiwara, EE Jan./Feb. 90, p206-210.

Reaeration Equations and Waste-Load Allocations, John L. Mancini, EE Mar./Apr. 91, p270-272.

Vegetated Submerged Beds with Artificial Substrates. I: BOD Removal, Peter S. Burgoon, Thomas A. DeBusk, K. R. Reddy and Ben Koopman, EE July/Aug. 91, p394-407.

Biodegradation
Aerobic Biological Regeneration of Dichloromethane-Loaded Activated Carbon, Joachim Holst, Burkhard Martens, Holger Gulyas, Norbert Greiser and Ivan Sekoulov, EE Mar./Apr. 91, p194-208.

Chlorinated Solvent Biodegradation by Methanotrophs in Unsaturated Soils, Gerald E. Speitel, Jr. and Frederick B. Closmann, EE Sept./Oct. 91, p541-558.

Enhanced In-Situ Biodegradation and Aquifer Permeability Reduction, Stewart W. Taylor and Peter R. Jaffé, EE Jan./Feb. 91, p25-46.

Biofilm
Calculation of Effectiveness Factors for Spherical Shells Using Shooting Technique, C. M. Wang, S. L. Ong and K. K. Ang, EE Nov./Dec. 91, p859-864.

Colloid Filtration in Fluidized Beds, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p299-313.

Colloid Removal in Fluidized-Bed Biofilm Reactor, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p314-329.

Effect of Biofilm Accumulation on Colloid Cohesion, Bruce E. Rittmann and Steven A. Wirtel, EE Sept./Oct. 91, p692-695.

Biological treatment
Enhanced In-Situ Biodegradation and Aquifer Permeability Reduction, Stewart W. Taylor and Peter R. Jaffé, EE Jan./Feb. 91, p25-46.

Steady-State Analysis for Biological Treatment of Inhibitory Substrates, Say Kee Ong and Alan R. Bowers, EE Nov./Dec. 90, p1013-1028.

Bubbles
Indexing Gas Transfer in Self-Aerated Flows, John S. Gulliver, John R. Thene and Alan J. Rindels, EE May/June 90, p503-523.

Capacity
Evaluating Capacities of GAC Preloaded with Natural Water, Thomas F. Speth, EE Jan./Feb. 91, p66-79.

Carbon monoxide
Prediction of CO Level Near Vehicular Tunnel with Waiting Queue, W. K. Chow, EE Jan./Feb. 91, p116-125.

Cements
Properties of Cement Made from Sludge, Joo-Hwa Tay and Kuan-Yeow Show, EE Mar./Apr. 91, p236-246.

Centrifuge model
Modeling Solute Transport by Centrifugation, Jay A. Celorie, Ted S. Vinson, Sandra L. Woods and Jonathan D. Istok, EE May/June 89, p513-526.

Characteristics
Engineering Properties of Incinerator Residue, Joo-Hwa Tay and Anthony T. C. Goh, EE Mar./Apr. 91, p224-235.

Chemical reactions
Inhibition of Acetate Methanogenesis by Phenols, Yi-Tin Wang, H. David Gabbard and Pin-Chieh Pai, EE July/Aug. 91, p487-500.

Methanogenic Biotransformation of Chlorinated Hydrocarbons in Ground Water, M. Yavuz Corapcioglu, M. Akhter Hossain and M. Akram Hossain, EE Jan./Feb. 91, p47-65.

Chlorides
Modeling Solute Transport by Centrifugation, Jay A. Celorie, Ted S. Vinson, Sandra L. Woods and Jonathan D. Istok, EE May/June 89, p513-526.

Chlorinated hydrocarbon pesticides
GAC Adsorber Design for Removal of Chlorinated Pesticides, Massoud Pirbazari, Badri N. Badriyha and Richard J. Miltner, EE Jan./Feb. 91, p80-100.

Chlorination
Chlorinated Solvent Biodegradation by Methanotrophs in Unsaturated Soils, Gerald E. Speitel, Jr. and Frederick B. Closmann, EE Sept./Oct. 91, p541-558.

Chlorine
Estimating Biotransformation Rate Constants for Sequential Reductive Dehalogenation Reactions, M. Yavuz Corapcioglu and M. Akhter Hossain, EE Sept./Oct. 91, p631-639.

Kinetics of Manganese(II) Oxidation with Chlorine, Oliver J. Hao, Allen P. Davis and Peter H. Chang, EE May/June 91, p359-374.

Clarifiers
Clarifier-Sludge-Blanket Behavior at Industrial Activated-Sludge Plant, Blaine F. Severin, EE Nov./Dec. 91, p718-730.

Internal-Wave Action in Gravity Clarifier, Lionel Catalan, Eva Ulrich, Robert R. Hudgins and Peter L. Silveston, EE July/Aug. 91, p457-471.

Clays
Clay-Blended Sludge as Lightweight Aggregate Concrete Material, Joo-Hwa Tay, Woon-Kwong Yip and Kuan-Yeow Show, EE Nov./Dec. 91, p834-844.

Cohesion
Colloid Filtration in Fluidized Beds, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p299-313.

Colloid Removal in Fluidized-Bed Biofilm Reactor, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p314-329.

Effect of Biofilm Accumulation on Colloid Cohesion, Bruce E. Rittmann and Steven A. Wirtel, EE Sept./Oct. 91, p692-695.

Coliforms
Investigation of Beach Contamination Using Tracer, Carl W. Chen, Luis E. Gomez, Ching L. Chen and D. Bruce Jacobsen, EE Jan./Feb. 91, p101-115.

Compressive strength
Clay-Blended Sludge as Lightweight Aggregate Concrete Material, Joo-Hwa Tay, Woon-Kwong Yip and Kuan-Yeow Show, EE Nov./Dec. 91, p834-844.

Properties of Cement Made from Sludge, Joo-Hwa Tay and Kuan-Yeow Show, EE Mar./Apr. 91, p236-246.

Computation
Reaeration Equations and Waste-Load Allocations, John L. Mancini, EE Mar./Apr. 91, p270-272.

Computer applications
Fuzzy Decision Making in Dredged-Material Management, Yong W. Lee, Istvan Bogardi and John Stansbury, EE Sept./Oct. 91, p614-630.

Preliminary Optimal Design Model for Wastewater Treatment Plant, Okitsugu Fujiwara, EE Jan./Feb. 90, p206-210.

Computer models
Dynamic Model of Pump Station, R. Bruce Robinson, Robert Robbins, David Martin and Keith Harris, EE Nov./Dec. 91, p852-858.

Computer programs
Preliminary Optimal Design Model for Wastewater Treatment Plant, Okitsugu Fujiwara, EE Jan./Feb. 90, p206-210.

Concrete
Clay-Blended Sludge as Lightweight Aggregate Concrete Material, Joo-Hwa Tay, Woon-Kwong Yip and Kuan-Yeow Show, EE Nov./Dec. 91, p834-844.

Microbial Ecology of Crown Corrosion in Sewers, Robert L. Islander, Joseph S. Devinny, Florian Mansfeld, Adam Postyn and Hong Shih, EE Nov./Dec. 91, p751-770.

Contaminants
Evaluating Capacities of GAC Preloaded with Natural Water, Thomas F. Speth, EE Jan./Feb. 91, p66-79.

Toxicant-Loading Concept for Organic Contaminants in Lakes, Steven C. Chapra, EE Sept./Oct. 91, p656-677.

Contamination
Estimating Oil and Grease Content of Petroleum-Contaminated Soil, John H. Martin, Jr., Amy J. Siebert and Raymond C. Loehr, EE May/June 91, p291-299.

Free Petroleum Hydrocarbon Volume Estimates from Monitoring Well Data, G. B. Wickramanayake, N. Gupta, R. E. Hinchee and B. J. Nielsen, EE Sept./Oct. 91, p686-691.

Investigation of Beach Contamination Using Tracer, Carl W. Chen, Luis E. Gomez, Ching L. Chen and D. Bruce Jacobsen, EE Jan./Feb. 91, p101-115.

Methanogenic Biotransformation of Chlorinated Hydrocarbons in Ground Water, M. Yavuz Corapcioglu, M. Akhter Hossain and M. Akram Hossain, EE Jan./Feb. 91, p47-65.

Corrosion

Microbial Ecology of Crown Corrosion in Sewers, Robert L. Islander, Joseph S. Devinny, Florian Mansfeld, Adam Postyn and Hong Shih, EE Nov./Dec. 91, p751-770.

Corrosion control

Limestone Contactors: Steady-State Design Relationships, Raymond D. Letterman, Marwan Hadad and Charles T. Driscoll, EE May/June 91, p339-358.

Cost effectiveness

GAC Adsorber Design for Removal of Chlorinated Pesticides, Massoud Pirbazari, Badri N. Badriyha and Richard J. Miltner, EE Jan./Feb. 91, p80-100.

Cost minimization

Preliminary Optimal Design Model for Wastewater Treatment Plant, Okitsugu Fujiwara, EE Jan./Feb. 90, p206-210.

Cost savings

Designing Treatment Basin Dimensions to Reduce Cost, F. Douglas Shields, Jr. and Edward L. Thackston, EE May/June 91, p381-386.

Decision making

Fuzzy Decision Making in Dredged-Material Management, Yong W. Lee, Istvan Bogardi and John Stansbury, EE Sept./Oct. 91, p614-630.

Denitrification

Vegetated Submerged Beds with Artificial Substrates. II: N and P Removal, Peter S. Burgoon, K. R. Reddy, Thomas A. DeBusk and Ben Koopman, EE July/Aug. 91, p408-424.

Density stratification

Quasi-Two-Dimensional Reservoir Simulation Model, Graeme C. Hocking and John C. Patterson, EE Sept./Oct. 91, p595-613.

Design criteria

Designing Treatment Basin Dimensions to Reduce Cost, F. Douglas Shields, Jr. and Edward L. Thackston, EE May/June 91, p381-386.

Developing countries

Wastewater Treatment Optimization Model for Developing World. I: Model Development, K. V. Ellis and S. L. Tang, EE July/Aug. 91, p501-518.

Differential equations

Calculation of Effectiveness Factors for Spherical Shells Using Shooting Technique, C. M. Wang, S. L. Ong and K. K. Ang, EE Nov./Dec. 91, p859-864.

Diffusion

Modified Solution of Homogeneous Surface Diffusion Model for Adsorption, Edward H. Smith, EE May/June 91, p320-338.

Dispersion

Model Parameter Estimation for Particle Transport, Andrew N. Ernest, James S. Bonner and Robin L. Autenrieth, EE Sept./Oct. 91, p573-594.

Dissolved oxygen

Delta Method for Estimating Primary Production, Respiration, and Reaeration in Streams, Steven C. Chapra and Dominic M. Di Toro, EE Sept./Oct. 91, p640-655.

Dissolved Oxygen Variations in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu, Y. K. Cheung and P. P. S. Wong, EE Nov./Dec. 91, p799-815.

Forecasting of Dissolved Oxygen in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu and Y. K. Cheung, EE Nov./Dec. 91, p816-833.

Water-Quality Impact Assessment for Hydropower, Ekaterini I. Daniil, John Gulliver and John R. Thene, EE Mar./Apr. 91, p179-193.

Dissolved solids

Measurement of Reaeration in Streams: Comparison of Techniques, J. R. Bicudo and A. James, EE Sept./Oct. 89, p992-1010.

Dredging

Fuzzy Decision Making in Dredged-Material Management, Yong W. Lee, Istvan Bogardi and John Stansbury, EE Sept./Oct. 91, p614-630.

Dye releases

Investigation of Beach Contamination Using Tracer, Carl W. Chen, Luis E. Gomez, Ching L. Chen and D. Bruce Jacobsen, EE Jan./Feb. 91, p101-115.

Dynamic models

Dynamic Model of Pump Station, R. Bruce Robinson, Robert Robbins, David Martin and Keith Harris, EE Nov./Dec. 91, p852-858.

Modified Solution of Homogeneous Surface Diffusion Model for Adsorption, Edward H. Smith, EE May/June 91, p320-338.

Electrical measurement

Electricity Use in Small Wastewater Treatment Plants, Dirk F. Young and Ben Koopman, EE May/June 91, p300-307.

Energy consumption

Electricity Use in Small Wastewater Treatment Plants, Dirk F. Young and Ben Koopman, EE May/June 91, p300-307.

Energy measurement

New Approach for Estimating Energy Content of Municipal Solid Waste, M. Z. Ali Khan and Ziad H. Abu-Gharara, EE May/June 91, p376-380.

Energy sources

New Approach for Estimating Energy Content of Municipal Solid Waste, M. Z. Ali Khan and Ziad H. Abu-Gharara, EE May/June 91, p376-380.

Environmental compatibility

Wastewater Treatment Optimization Model for Developing World. I: Model Development, K. V. Ellis and S. L. Tang, EE July/Aug. 91, p501-518.

Environmental impacts

Fuzzy Decision Making in Dredged-Material Management, Yong W. Lee, Istvan Bogardi and John Stansbury, EE Sept./Oct. 91, p614-630.

Water-Quality Impact Assessment for Hydropower, Ekaterini I. Daniil, John Gulliver and John R. Thene, EE Mar./Apr. 91, p179-193.

Estimating

Critique of Floating-Dome Technique for Estimating Reaeration Rates, T. V. Belanger and E. A. Korzun, EE Jan./Feb. 91, p144-150.

Delta Method for Estimating Primary Production, Respiration, and Reaeration in Streams, Steven C. Chapra and Dominic M. Di Toro, EE Sept./Oct. 91, p640-655.

Free Petroleum Hydrocarbon Volume Estimates from Monitoring Well Data, G. B. Wickramanayake, N. Gupta, R. E. Hinchee and B. J. Nielsen, EE Sept./Oct. 91, p686-691.

Estimation

Model Parameter Estimation for Particle Transport, Andrew N. Ernest, James S. Bonner and Robin L. Autenrieth, EE Sept./Oct. 91, p573-594.

New Approach for Estimating Energy Content of Municipal Solid Waste, M. Z. Ali Khan and Ziad H. Abu-Gharara h, EE May/June 91, p376-380.

Evapotranspiration

Vegetated Submerged Beds with Artificial Substrates. I: BOD Removal, Peter S. Burgoon, Thomas A. DeBusk, K. R. Reddy and Ben Koopman, EE July/Aug. 91, p394-407.

Experimentation

Influence of Waves on Air-Water Gas Transfer, Ekaterini I. Daniil and John S. Gulliver, EE Sept./Oct. 91, p522-540.

Extraction procedures

Elution Profiles of Three Chlorinated Hydrocarbons Leaching Through Sandy Soil, Barbara A. Bates, Gary R. Brenniman, Robert J. Allen and Robert J. Anderson, EE May/June 91, p279-290.

Field tests

Loss of PCBs from Municipal-Sludge-Treated Farmland, P. Mac Berthouex and D. Robert Gan, EE Jan./Feb. 91, p5-24.

Filters

Effect of Solids Property on Rates of Solids Dislodgment, Jerry Y. C. Huang and Javier Basagoiti, EE Jan./Feb. 89, p3-19.

Filtration

Colloid Filtration in Fluidized Beds, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p299-313.

Colloid Removal in Fluidized-Bed Biofilm Reactor, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p314-329.

Effect of Biofilm Accumulation on Colloid Cohesion, Bruce E. Rittmann and Steven A. Wirtel, EE Sept./Oct. 91, p692-695.

Light-Scatter Particle Counting: Improving Filtered-Water Quality, Carrie M. Lewis and David H. Manz, EE Mar./Apr. 91, p209-223.

Finite differences

Modified Solution of Homogeneous Surface Diffusion Model for Adsorption, Edward H. Smith, EE May/June 91, p320-338.

Fixed-bed operations

Modified Solution of Homogeneous Surface Diffusion Model for Adsorption, Edward H. Smith, EE May/June 91, p320-338.

Flocculation

Analytical Approach for Evaluation of Settling Column Data, Hasan Ali San, EE Mar./Apr. 89, p455-461.

Turbulence Intensity of Mixing in Relation to Flocculation, Gordon L. McConnachie, EE Nov./Dec. 91, p731-750.

Flow

Indexing Gas Transfer in Self-Aerated Flows, John S. Gulliver, John R. Thene and Alan J. Rindels, EE May/June 90, p503-523.

Fluidized bed processing

Aerobic Biological Regeneration of Dichloromethane-Loaded Activated Carbon, Joachim Holst, Burkhard Martens, Holger Gulyas, Norbert Greiser and Ivan Sekoulov, EE Mar./Apr. 91, p194-208.

Colloid Filtration in Fluidized Beds, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p299-313.

Colioid Removal in Fluidized-Bed Biofilm Reactor, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p314-329.

Fluidized bed processors

Effect of Biofilm Accumulation on Colloid Cohesion, Bruce E. Rittmann and Steven A. Wirtel, EE Sept./Oct. 91, p692-695.

Fly ash

Engineering Properties of Incinerator Residue, Joo-Hwa Tay and Anthony T. C. Goh, EE Mar./Apr. 91, p224-235.

Food processing

Industrial-Waste Land Treatment Practices, Dante J. Tedaldi and Raymond C. Loehr, EE Nov./Dec. 91, p846-851.

Forecasting

Forecasting of Dissolved Oxygen in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu and Y. K. Cheung, EE Nov./Dec. 91, p816-833.

Fuzzy sets

Fuzzy Decision Making in Dredged-Material Management, Yong W. Lee, Istvan Bogardi and John Stansbury, EE Sept./Oct. 91, p614-630.

Gas formation
Indexing Gas Transfer in Self-Aerated Flows, John S. Gulliver, John R. Thene and Alan J. Rindels, EE May/June 90, p503-523.

Geometry
Designing Treatment Basin Dimensions to Reduce Cost, F. Douglas Shields, Jr. and Edward L. Thackston, EE May/June 91, p381-386.

Geotechnical investigations
Free Petroleum Hydrocarbon Volume Estimates from Monitoring Well Data, G. B. Wickramanayake, N. Gupta, R. E. Hinchee and B. J. Nielsen, EE Sept./Oct. 91, p686-691.

Giardiasis
Light-Scatter Particle Counting: Improving Filtered-Water Quality, Carrie M. Lewis and David H. Manz, EE Mar./Apr. 91, p209-223.

Granular materials
Effect of Solids Property on Rates of Solids Dislodgment, Jerry Y. C. Huang and Javier Basagoiti, EE Jan./Feb. 89, p3-19.

Gravel
Model Study of Jet-Circulated Grit Chamber, Asher Brenner and Mordechai H. Diskin, EE Nov./Dec. 91, p782-787.

Vegetated Submerged Beds with Artificial Substrates. I: BOD Removal, Peter S. Burgoon, Thomas A. DeBusk, K. R. Reddy and Ben Koopman, EE July/Aug. 91, p394-407.

Vegetated Submerged Beds with Artificial Substrates. II: N and P Removal, Peter S. Burgoon, K. R. Reddy, Thomas A. DeBusk and Ben Koopman, EE July/Aug. 91, p408-424.

Grease
Estimating Oil and Grease Content of Petroleum-Contaminated Soil, John H. Martin, Jr., Amy J. Siebert and Raymond C. Loehr, EE May/June 91, p291-299.

Ground water
Elution Profiles of Three Chlorinated Hydrocarbons Leaching Through Sandy Soil, Barbara A. Bates, Gary R. Brenniman, Robert J. Allen and Robert J. Anderson, EE May/June 91, p279-290.

Enhanced In-Situ Biodegradation and Aquifer Permeability Reduction, Stewart W. Taylor and Peter R. Jaffé, EE Jan./Feb. 91, p25-46.

Evaluating Capacities of GAC Preloaded with Natural Water, Thomas F. Speth, EE Jan./Feb. 91, p66-79.

Methanogenic Biotransformation of Chlorinated Hydrocarbons in Ground Water, M. Yavuz Corapcioglu, M. Akhter Hossain and M. Akram Hossain, EE Jan./Feb. 91, p47-65.

Ground-water pollution
Evaluation of Cascade Air Stripping—Pilot-Scale and Prototype Studies, N. Nirmalakhandan, Won Jang and Richard E. Speece, EE Nov./Dec. 91, p788-798.

Hazardous waste
Permeable Treatment Beds for Plating Sludge Disposal, Raymond W. Regan, Sr., Cynthia E. Draper and Rong-jin Leu, EE Sept./Oct. 91, p559-572.

Hudson River
Model of Fate and Accumulation of PCB Homologues in Hudson Estuary, Robert V. Thomann, John A. Mueller, Richard P. Winfield and Chi-Rong Huang, EE Mar./Apr. 91, p161-178.

Humic substances
GAC Adsorber Design for Removal of Chlorinated Pesticides, Massoud Pirbazari, Badri N. Badriyha and Richard J. Miltner, EE Jan./Feb. 91, p80-100.

Hydraulics
Designing Treatment Basin Dimensions to Reduce Cost, F. Douglas Shields, Jr. and Edward L. Thackston, EE May/June 91, p381-386.

Dynamic Model of Pump Station, R. Bruce Robinson, Robert Robbins, David Martin and Keith Harris, EE Nov./Dec. 91, p852-858.

Hydrocarbons
Elution Profiles of Three Chlorinated Hydrocarbons Leaching Through Sandy Soil, Barbara A. Bates, Gary R. Brenniman, Robert J. Allen and Robert J. Anderson, EE May/June 91, p279-290.

Estimating Biotransformation Rate Constants for Sequential Reductive Dehalogenation Reactions, M. Yavuz Corapcioglu and M. Akhter Hossain, EE Sept./Oct. 91, p631-639.

Free Petroleum Hydrocarbon Volume Estimates from Monitoring Well Data, G. B. Wickramanayake, N. Gupta, R. E. Hinchee and B. J. Nielsen, EE Sept./Oct. 91, p686-691.

Methanogenic Biotransformation of Chlorinated Hydrocarbons in Ground Water, M. Yavuz Corapcioglu, M. Akhter Hossain and M. Akram Hossain, EE Jan./Feb. 91, p47-65.

Hydroelectric power
Water-Quality Impact Assessment for Hydropower, Ekaterini I. Daniil, John Gulliver and John R. Thene, EE Mar./Apr. 91, p179-193.

Incineration
Clay-Blended Sludge as Lightweight Aggregate Concrete Material, Joo-Hwa Tay, Woon-Kwong Yip and Kuan-Yeow Show, EE Nov./Dec. 91, p834-844.

Engineering Properties of Incinerator Residue, Joo-Hwa Tay and Anthony T. C. Goh, EE Mar./Apr. 91, p224-235.

Properties of Cement Made from Sludge, Joo-Hwa Tay and Kuan-Yeow Show, EE Mar./Apr. 91, p236-246.

Indexing
Indexing Gas Transfer in Self-Aerated Flows, John S. Gulliver, John R. Thene and Alan J. Rindels, EE May/June 90, p503-523.

Industrial wastes
Industrial-Waste Land Treatment Practices, Dante J. Tedaldi and Raymond C. Loehr, EE Nov./Dec. 91, p846-851.

Influents
Chemical Dosing of Small Water Utilities Using Regression Analysis, Glenn W. Ellis, Anthony G. Collins, Xi Ge and Catherine R. Ford, EE May/June 91, p308-319.

Internal waves
Internal-Wave Action in Gravity Clarifier, Lionel Catalan, Eva Ulrich, Robert R. Hudgins and Peter L. Silveston, EE July/Aug. 91, p457-471.

Kaolin
Modeling Solute Transport by Centrifugation, Jay A. Celorie, Ted S. Vinson, Sandra L. Woods and Jonathan D. Istok, EE May/June 89, p513-526.

Kinetics
Calculation of Effectiveness Factors for Spherical Shells Using Shooting Technique, C. M. Wang, S. L. Ong and K. K. Ang, EE Nov./Dec. 91, p859-864.

Kinetics of Manganese(II) Oxidation with Chlorine, Oliver J. Hao, Allen P. Davis and Peter H. Chang, EE May/June 91, p359-374.

Laboratory tests
Measurement of Reaeration in Streams: Comparison of Techniques, J. R. Bicudo and A. James, EE Sept./Oct. 89, p992-1010.

Permeable Treatment Beds for Plating Sludge Disposal, Raymond W. Regan, Sr., Cynthia E. Draper and Rong-jin Leu, EE Sept./Oct. 91, p559-572.

Lakes
Quasi-Two-Dimensional Reservoir Simulation Model, Graeme C. Hocking and John C. Patterson, EE Sept./Oct. 91, p595-613.

Toxicant-Loading Concept for Organic Contaminants in Lakes, Steven C. Chapra, EE Sept./Oct. 91, p656-677.

Land application
Loss of PCBs from Municipal-Sludge–Treated Farmland, P. Mac Berthouex and D. Robert Gan, EE Jan./Feb. 91, p5-24.

Land treatment
Industrial-Waste Land Treatment Practices, Dante J. Tedaldi and Raymond C. Loehr, EE Nov./Dec. 91, p846-851.

Landfills
Permeable Treatment Beds for Plating Sludge Disposal, Raymond W. Regan, Sr., Cynthia E. Draper and Rong-jin Leu, EE Sept./Oct. 91, p559-572.

Leaching
Elution Profiles of Three Chlorinated Hydrocarbons Leaching Through Sandy Soil, Barbara A. Bates, Gary R. Brenniman, Robert J. Allen and Robert J. Anderson, EE May/June 91, p279-290.

Permeable Treatment Beds for Plating Sludge Disposal, Raymond W. Regan, Sr., Cynthia E. Draper and Rong-jin Leu, EE Sept./Oct. 91, p559-572.

Lime
Chemical Dosing of Small Water Utilities Using Regression Analysis, Glenn W. Ellis, Anthony G. Collins, Xi Ge and Catherine R. Ford, EE May/June 91, p308-319.

Limestone
Limestone Contactors: Steady-State Design Relationships, Raymond D. Letterman, Marwan Hadad and Charles T. Driscoll, EE May/June 91, p339-358.

Manganese
Kinetics of Manganese(II) Oxidation with Chlorine, Oliver J. Hao, Allen P. Davis and Peter H. Chang, EE May/June 91, p359-374.

Mass transfer
Influence of Waves on Air-Water Gas Transfer, Ekaterini I. Daniil and John S. Gulliver, EE Sept./Oct. 91, p522-540.

Mass transport
Colloid Filtration in Fluidized Beds, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p299-313.

Colloid Removal in Fluidized-Bed Biofilm Reactor, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p314-329.

Mathematical models
Acidification Potential of Snowpack in Sierra Nevada, Carl W. Chen, Luis E. Gomez and Lanny J. Lund, EE July/Aug. 91, p472-486.

Analytical Approach for Evaluation of Settling Column Data, Hasan Ali San, EE Mar./Apr. 89, p455-461.

Dissolved Oxygen Variations in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu, Y. K. Cheung and P. P. S. Wong, EE Nov./Dec. 91, p799-815.

Forecasting of Dissolved Oxygen in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu and Y. K. Cheung, EE Nov./Dec. 91, p816-833.

Investigation of Beach Contamination Using Tracer, Carl W. Chen, Luis E. Gomez, Ching L. Chen and D. Bruce Jacobsen, EE Jan./Feb. 91, p101-115.

Model Parameter Estimation for Particle Transport, Andrew N. Ernest, James S. Bonner and Robin L. Autenrieth, EE Sept./Oct. 91, p573-594.

Prediction of CO Level Near Vehicular Tunnel with Waiting Queue, W. K. Chow, EE Jan./Feb. 91, p116-125.

Preliminary Optimal Design Model for Wastewater Treatment Plant, Okitsugu Fujiwara, EE Jan./Feb. 90, p206-210.

Measurement
Critique of Floating-Dome Technique for Estimating Reaeration Rates, T. V. Belanger and E. A. Korzun, EE Jan./Feb. 91, p144-150.

Measurement of Reaeration in Streams: Comparison of Techniques, J. R. Bicudo and A. James, EE Sept./Oct. 89, p992-1010.

Metal finishing

Permeable Treatment Beds for Plating Sludge Disposal, Raymond W. Regan, Sr., Cynthia E. Draper and Rong-jin Leu, EE Sept./Oct. 91, p559-572.

Metals

Permeable Treatment Beds for Plating Sludge Disposal, Raymond W. Regan, Sr., Cynthia E. Draper and Rong-jin Leu, EE Sept./Oct. 91, p559-572.

Methane

Chlorinated Solvent Biodegradation by Methanotrophs in Unsaturated Soils, Gerald E. Speitel, Jr. and Frederick B. Closmann, EE Sept./Oct. 91, p541-558.

Methane generation

Inhibition of Acetate Methanogenesis by Phenols, Yi-Tin Wang, H. Devid Gabbard and Pin-Chieh Pai, EE July/Aug. 91, p487-500.

Microbial activity

Estimating Biotransformation Rate Constants for Sequential Reductive Dehalogenation Reactions, M. Yavuz Corapcioglu and M. Akhter Hossain, EE Sept./Oct. 91, p631-639.

Microbial Ecology of Crown Corrosion in Sewers, Robert L. Islander, Joseph S. Devinny, Florian Mansfeld, Adam Postyn and Hong Shih, EE Nov./Dec. 91, p751-770.

Migration

Modeling Solute Transport by Centrifugation, Jay A. Celorie, Ted S. Vinson, Sandra L. Woods and Jonathan D. Istok, EE May/June 89, p513-526.

Mixing

Turbulence Intensity of Mixing in Relation to Flocculation, Gordon L. McConnachie, EE Nov./Dec. 91, p731-750.

Modeling

Estimating Biotransformation Rate Constants for Sequential Reductive Dehalogenation Reactions, M. Yavuz Corapcioglu and M. Akhter Hossain, EE Sept./Oct. 91, p631-639.

Free Petroleum Hydrocarbon Volume Estimates from Monitoring Well Data, G. B. Wickramanayake, N. Gupta, R. E. Hinchee and B. J. Nielsen, EE Sept./Oct. 91, p686-691.

GAC Adsorber Design for Removal of Chlorinated Pesticides, Massoud Pirbazari, Badri N. Badriyha and Richard J. Miltner, EE Jan./Feb. 91, p80-100.

Model Study of Jet-Circulated Grit Chamber, Asher Brenner and Mordechai H. Diskin, EE Nov./Dec. 91, p782-787.

Modeling Solute Transport by Centrifugation, Jay A. Celorie, Ted S. Vinson, Sandra L. Woods and Jonathan D. Istok, EE May/June 89, p513-526.

Models

Delta Method for Estimating Primary Production, Respiration, and Reaeration in Streams, Steven C. Chapra and Dominic M. Di Toro, EE Sept./Oct. 91, p640-655.

Enhanced In-Situ Biodegradation and Aquifer Permeability Reduction, Stewart W. Taylor and Peter R. Jaffé, EE Jan./Feb. 91, p25-46.

Primary Productivity in Sewage Pond: Semiempirical Model, M. Llorens, J. Sáez and A. Soler, EE Nov./Dec. 91, p771-781.

Mortars

Properties of Cement Made from Sludge, Joo-Hwa Tay and Kuan-Yeow Show, EE Mar./Apr. 91, p236-246.

Multiple objective analysis

Fuzzy Decision Making in Dredged-Material Management, Yong W. Lee, Istvan Bogardi and John Stansbury, EE Sept./Oct. 91, p614-630.

Municipal wastes

Loss of PCBs from Municipal-Sludge–Treated Farmland, P. Mac Berthouex and D. Robert Gan, EE Jan./Feb. 91, p5-24.

New Approach for Estimating Energy Content of Municipal Solid Waste, M. Z. Ali Khan and Ziad H. Abu-Ghararah, EE May/June 91, p376-380.

Neutralization

Limestone Contactors: Steady-State Design Relationships, Raymond D. Letterman, Marwan Hadad and Charles T. Driscoll, EE May/June 91, p339-358.

Noise control

Controlling Sewage Treatment Plant Noise, Roswell A. Harris and Louis F. Cohn, EE Sept./Oct. 91, p680-685.

Noise measurement

Controlling Sewage Treatment Plant Noise, Roswell A. Harris and Louis F. Cohn, EE Sept./Oct. 91, p680-685.

Noise reduction

Controlling Sewage Treatment Plant Noise, Roswell A. Harris and Louis F. Cohn, EE Sept./Oct. 91, p680-685.

Nonlinear programming

Robust Optimal Design for Wastewater Treatment. Part I: General Approach, James G. Uber, E. Downey Brill, Jr. and John T. Pfeffer, EE July/Aug. 91, p425-437.

Robust Optimal Design for Wastewater Treatment. Part II: Application, James G. Uber, John T. Pfeffer and E. Downey Brill, Jr., EE July/Aug. 91, p438-456.

Numerical analysis

Modified Solution of Homogeneous Surface Diffusion Model for Adsorption, Edward H. Smith, EE May/June 91, p320-338.

Oil spills

Estimating Oil and Grease Content of Petroleum-Contaminated Soil, John H. Martin, Jr., Amy J. Siebert and Raymond C. Loehr, EE May/June 91, p291-299.

Oils

Estimating Oil and Grease Content of Petroleum-Contaminated Soil, John H. Martin, Jr., Amy J. Siebert and Raymond C. Loehr, EE May/June 91, p291-299.

Optimal design

Preliminary Optimal Design Model for Wastewater Treatment Plant, Okitsugu Fujiwara, EE Jan./Feb. 90, p206-210.

Robust Optimal Design for Wastewater Treatment. Part I: General Approach, James G. Uber, E. Downey Brill, Jr. and John T. Pfeffer, EE July/Aug. 91, p425-437.

Robust Optimal Design for Wastewater Treatment. Part II: Application, James G. Uber, John T. Pfeffer and E. Downey Brill, Jr., EE July/Aug. 91, p438-456.

Optimization models

Wastewater Treatment Optimization Model for Developing World. I: Model Development, K. V. Ellis and S. L. Tang, EE July/Aug. 91, p501-518.

Organic compounds

Toxicant-Loading Concept for Organic Contaminants in Lakes, Steven C. Chapra, EE Sept./Oct. 91, p656-677.

Oxidation

Kinetics of Manganese(II) Oxidation with Chlorine, Oliver J. Hao, Allen P. Davis and Peter H. Chang, EE May/June 91, p359-374.

Oxygen

Critique of Floating-Dome Technique for Estimating Reaeration Rates, T. V. Belanger and E. A. Korzun, EE Jan./Feb. 91, p144-150.

Oxygen content

Measurement of Reaeration in Streams: Comparison of Techniques, J. R. Bicudo and A. James, EE Sept./Oct. 89, p992-1010.

Oxygen demand

Dissolved Oxygen Variations in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu, Y. K. Cheung and P. P. S. Wong, EE Nov./Dec. 91, p799-815.

Forecasting of Dissolved Oxygen in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu and Y. K. Cheung, EE Nov./Dec. 91, p816-833.

Oxygen transfer

Dynamic Surface Tension Effects on Oxygen Transfer, Gail K. Masutani and Michael K. Stenstrom, EE Jan./Feb. 91, p126-142.

Influence of Waves on Air-Water Gas Transfer, Ekaterini I. Daniil and John S. Gulliver, EE Sept./Oct. 91, p522-540.

Oxygenation

Delta Method for Estimating Primary Production, Respiration, and Reaeration in Streams, Steven C. Chapra and Dominic M. Di Toro, EE Sept./Oct. 91, p640-655.

Paper industry

Industrial-Waste Land Treatment Practices, Dante J. Tedaldi and Raymond C. Loehr, EE Nov./Dec. 91, p846-851.

Parameters

Model Parameter Estimation for Particle Transport, Andrew N. Ernest, James S. Bonner and Robin L. Autenrieth, EE Sept./Oct. 91, p573-594.

Robust Optimal Design for Wastewater Treatment. Part I: General Approach, James G. Uber, E. Downey Brill, Jr. and John T. Pfeffer, EE July/Aug. 91, p425-437.

Robust Optimal Design for Wastewater Treatment. Part II: Application, James G. Uber, John T. Pfeffer and E. Downey Brill, Jr., EE July/Aug. 91, p438-456.

Particles

Colloid Filtration in Fluidized Beds, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p299-313.

Colloid Removal in Fluidized-Bed Biofilm Reactor, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p314-329.

Effect of Biofilm Accumulation on Colloid Cohesion, Bruce E. Rittmann and Steven A. Wirtel, EE Sept./Oct. 91, p692-695.

Light-Scatter Particle Counting: Improving Filtered-Water Quality, Carrie M. Lewis and David H. Manz, EE Mar./Apr. 91, p209-223.

Model Parameter Estimation for Particle Transport, Andrew N. Ernest, James S. Bonner and Robin L. Autenrieth, EE Sept./Oct. 91, p573-594.

PCB

Loss of PCBs from Municipal-Sludge–Treated Farmland, P. Mac Berthouex and D. Robert Gan, EE Jan./Feb. 91, p5-24.

Model of Fate and Accumulation of PCB Homologues in Hudson Estuary, Robert V. Thomann, John A. Mueller, Richard P. Winfield and Chi-Rong Huang, EE Mar./Apr. 91, p161-178.

Performance evaluation

Internal-Wave Action in Gravity Clarifier, Lionel Catalan, Eva Ulrich, Robert R. Hudgins and Peter L. Silveston, EE July/Aug. 91, p457-471.

Petroleum

Estimating Oil and Grease Content of Petroleum-Contaminated Soil, John H. Martin, Jr., Amy J. Siebert and Raymond C. Loehr, EE May/June 91, p291-299.

Free Petroleum Hydrocarbon Volume Estimates from Monitoring Well Data, G. B. Wickramanayake, N. Gupta, R. E. Hinchee and B. J. Nielsen, EE Sept./Oct. 91, p686-691.

Phenol

Inhibition of Acetate Methanogenesis by Phenols, Yi-Tin Wang, H. David Gabbard and Pin-Chieh Pai, EE July/Aug. 91, p487-500.

Steady-State Analysis for Biological Treatment of Inhibitory Substrates, Say Kee Ong and Alan R. Bowers, EE Nov./Dec. 90, p1013-1028.

Phosphorus removal

Vegetated Submerged Beds with Artificial Substrates. II: N and P Removal, Peter S. Burgoon, K. R. Reddy, Thomas A. DeBusk and Ben Koopman, EE July/Aug. 91, p408-424.

Photosynthesis
Delta Method for Estimating Primary Production, Respiration, and Reaeration in Streams, Steven C. Chapra and Dominic M. Di Toro, EE Sept./Oct. 91, p640-655.

Physical properties
Engineering Properties of Incinerator Residue, Joo-Hwa Tay and Anthony T. C. Goh, EE Mar./Apr. 91, p224-235.

Plastics
Vegetated Submerged Beds with Artificial Substrates. I: BOD Removal, Peter S. Burgoon, Thomas A. DeBusk, K. R. Reddy and Ben Koopman, EE July/Aug. 91, p394-407.

Vegetated Submerged Beds with Artificial Substrates. II: N and P Removal, Peter S. Burgoon, K. R. Reddy, Thomas A. DeBusk and Ben Koopman, EE July/Aug. 91, p408-424.

Pollutants
Modeling Solute Transport by Centrifugation, Jay A. Celorie, Ted S. Vinson, Sandra L. Woods and Jonathan D. Istok, EE May/June 89, p513-526.

Ponds
Primary Productivity in Sewage Pond: Semiempirical Model, M. Llorens, J. Sáez and A. Soler, EE Nov./Dec. 91, p771-781.

Potable water
GAC Adsorber Design for Removal of Chlorinated Pesticides, Massoud Pirbazari, Badri N. Badriyha and Richard J. Miltner, EE Jan./Feb. 91, p80-100.

Predictions
Prediction of CO Level Near Vehicular Tunnel with Waiting Queue, W. K. Chow, EE Jan./Feb. 91, p116-125.

Preloading
Evaluating Capacities of GAC Preloaded with Natural Water, Thomas F. Speth, EE Jan./Feb. 91, p66-79.

Probability
Steady-State Analysis for Biological Treatment of Inhibitory Substrates, Say Kee Ong and Alan R. Bowers, EE Nov./Dec. 90, p1013-1028.

Productivity
Primary Productivity in Sewage Pond: Semiempirical Model, M. Llorens, J. Sáez and A. Soler, EE Nov./Dec. 91, p771-781.

Properties
Properties of Cement Made from Sludge, Joo-Hwa Tay and Kuan-Yeow Show, EE Mar./Apr. 91, p236-246.

Prototype tests
Evaluation of Cascade Air Stripping—Pilot-Scale and Prototype Studies, N. Nirmalakhandan, Won Jang and Richard E. Speece, EE Nov./Dec. 91, p788-798.

Pumping stations
Dynamic Model of Pump Station, R. Bruce Robinson, Robert Robbins, David Martin and Keith Harris, EE Nov./Dec. 91, p852-858.

Pumps
Dynamic Model of Pump Station, R. Bruce Robinson, Robert Robbins, David Martin and Keith Harris, EE Nov./Dec. 91, p852-858.

Reaeration
Critique of Floating-Dome Technique for Estimating Reaeration Rates, T. V. Belanger and E. A. Korzun, EE Jan./Feb. 91, p144-150.

Delta Method for Estimating Primary Production, Respiration, and Reaeration in Streams, Steven C. Chapra and Dominic M. Di Toro, EE Sept./Oct. 91, p640-655.

Indexing Gas Transfer in Self-Aerated Flows, John S. Gulliver, John R. Thene and Alan J. Rindels, EE May/June 90, p503-523.

Influence of Waves on Air-Water Gas Transfer, Ekaterini I. Daniil and John S. Gulliver, EE Sept./Oct. 91, p522-540.

Measurement of Reaeration in Streams: Comparison of Techniques, J. R. Bicudo and A. James, EE Sept./Oct. 89, p992-1010.

Reaeration Equations and Waste-Load Allocations, John L. Mancini, EE Mar./Apr. 91, p270-272.

Regeneration
Aerobic Biological Regeneration of Dichloromethane-Loaded Activated Carbon, Joachim Holst, Burkhard Martens, Holger Gulyas, Norbert Greiser and Ivan Sekoulov, EE Mar./Apr. 91, p194-208.

Regression analysis
Chemical Dosing of Small Water Utilities Using Regression Analysis, Glenn W. Ellis, Anthony G. Collins, Xi Ge and Catherine R. Ford, EE May/June 91, p308-319.

Reservoirs
Quasi-Two-Dimensional Reservoir Simulation Model, Graeme C. Hocking and John C. Patterson, EE Sept./Oct. 91, p595-613.

Retention time
Designing Treatment Basin Dimensions to Reduce Cost, F. Douglas Shields, Jr. and Edward L. Thackston, EE May/June 91, p381-386.

Scale models
Model of Fate and Accumulation of PCB Homologues in Hudson Estuary, Robert V. Thomann, John A. Mueller, Richard P. Winfield and Chi-Rong Huang, EE Mar./Apr. 91, p161-178.

Model Study of Jet-Circulated Grit Chamber, Asher Brenner and Mordechai H. Diskin, EE Nov./Dec. 91, p782-787.

Sediment
Dissolved Oxygen Variations in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu, Y. K. Cheung and P. P. S. Wong, EE Nov./Dec. 91, p799-815.

Forecasting of Dissolved Oxygen in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu and Y. K. Cheung, EE Nov./Dec. 91, p816-833.

Toxicant-Loading Concept for Organic Contaminants in Lakes, Steven C. Chapra, EE Sept./Oct. 91, p656-677.

Sedimentation

Clarifier-Sludge-Blanket Behavior at Industrial Activated-Sludge Plant, Blaine F. Severin, EE Nov./Dec. 91, p718-730.

Internal-Wave Action in Gravity Clarifier, Lionel Catalan, Eva Ulrich, Robert R. Hudgins and Peter L. Silveston, EE July/Aug. 91, p457-471.

Sensitivity analysis

Robust Optimal Design for Wastewater Treatment. Part I: General Approach, James G. Uber, E. Downey Brill, Jr. and John T. Pfeffer, EE July/Aug. 91, p425-437.

Robust Optimal Design for Wastewater Treatment. Part II: Application, James G. Uber, John T. Pfeffer and E. Downey Brill, Jr., EE July/Aug. 91, p438-456.

Separation

Effect of Solids Property on Rates of Solids Dislodgment, Jerry Y. C. Huang and Javier Basagoiti, EE Jan./Feb. 89, p3-19.

Settlement analysis

Analytical Approach for Evaluation of Settling Column Data, Hasan Ali San, EE Mar./Apr. 89, p455-461.

Settling velocity

Model Parameter Estimation for Particle Transport, Andrew N. Ernest, James S. Bonner and Robin L. Autenrieth, EE Sept./Oct. 91, p573-594.

Sewage treatment

Primary Productivity in Sewage Pond: Semiempirical Model, M. Llorens, J. Sáez and A. Soler, EE Nov./Dec. 91, p771-781.

Sewage treatment plants

Controlling Sewage Treatment Plant Noise, Roswell A. Harris and Louis F. Cohn, EE Sept./Oct. 91, p680-685.

Sewers

Microbial Ecology of Crown Corrosion in Sewers, Robert L. Islander, Joseph S. Devinny, Florian Mansfeld, Adam Postyn and Hong Shih, EE Nov./Dec. 91, p751-770.

Sludge

Properties of Cement Made from Sludge, Joo-Hwa Tay and Kuan-Yeow Show, EE Mar./Apr. 91, p236-246.

Sludge disposal

Clay-Blended Sludge as Lightweight Aggregate Concrete Material, Joo-Hwa Tay, Woon-Kwong Yip and Kuan-Yeow Show, EE Nov./Dec. 91, p834-844.

Loss of PCBs from Municipal-Sludge–Treated Farmland, P. Mac Berthouex and D. Robert Gan, EE Jan./Feb. 91, p5-24.

Permeable Treatment Beds for Plating Sludge Disposal, Raymond W. Regan, Sr., Cynthia E. Draper and Rong-jin Leu, EE Sept./Oct. 91, p559-572.

Properties of Cement Made from Sludge, Joo-Hwa Tay and Kuan-Yeow Show, EE Mar./Apr. 91, p236-246.

Sludge treatment

Robust Optimal Design for Wastewater Treatment. Part II: Application, James G. Uber, John T. Pfeffer and E. Downey Brill, Jr., EE July/Aug. 91, p438-456.

Snowmelt

Acidification Potential of Snowpack in Sierra Nevada, Carl W. Chen, Luis E. Gomez and Lanny J. Lund, EE July/Aug. 91, p472-486.

Snowpacks

Acidification Potential of Snowpack in Sierra Nevada, Carl W. Chen, Luis E. Gomez and Lanny J. Lund, EE July/Aug. 91, p472-486.

Sociological factors

Wastewater Treatment Optimization Model for Developing World. I: Model Development, K. V. Ellis and S. L. Tang, EE July/Aug. 91, p501-518.

Soil pollution

Estimating Oil and Grease Content of Petroleum-Contaminated Soil, John H. Martin, Jr., Amy J. Siebert and Raymond C. Loehr, EE May/June 91, p291-299.

Soil porosity

Elution Profiles of Three Chlorinated Hydrocarbons Leaching Through Sandy Soil, Barbara A. Bates, Gary R. Brenniman, Robert J. Allen and Robert J. Anderson, EE May/June 91, p279-290.

Soil stabilization

Engineering Properties of Incinerator Residue, Joo-Hwa Tay and Anthony T. C. Goh, EE Mar./Apr. 91, p224-235.

Soils

Estimating Oil and Grease Content of Petroleum-Contaminated Soil, John H. Martin, Jr., Amy J. Siebert and Raymond C. Loehr, EE May/June 91, p291-299.

Modeling Solute Transport by Centrifugation, Jay A. Celorie, Ted S. Vinson, Sandra L. Woods and Jonathan D. Istok, EE May/June 89, p513-526.

Soils, unsaturated

Chlorinated Solvent Biodegradation by Methanotrophs in Unsaturated Soils, Gerald E. Speitel, Jr. and Frederick B. Closmann, EE Sept./Oct. 91, p541-558.

Solid wastes

Industrial-Waste Land Treatment Practices, Dante J. Tedaldi and Raymond C. Loehr, EE Nov./Dec. 91, p846-851.

New Approach for Estimating Energy Content of Municipal Solid Waste, M. Z. Ali Khan and Ziad H. Abu-Ghararah, EE May/June 91, p376-380.

Solids

Effect of Solids Property on Rates of Solids Dislodgment, Jerry Y. C. Huang and Javier Basagoiti, EE Jan./Feb. 89, p3-19.

Solutes

Modeling Solute Transport by Centrifugation, Jay A. Celorie, Ted S. Vinson, Sandra L. Woods and Jonathan D. Istok, EE May/June 89, p513-526.

Solvents

Chlorinated Solvent Biodegradation by Methanotrophs in Unsaturated Soils, Gerald E. Speitel, Jr. and Frederick B. Closmann, EE Sept./Oct. 91, p541-558.

Estimating Oil and Grease Content of Petroleum-Contaminated Soil, John H. Martin, Jr., Amy J. Siebert and Raymond C. Loehr, EE May/June 91, p291-299.

Sorption

Toxicant-Loading Concept for Organic Contaminants in Lakes, Steven C. Chapra, EE Sept./Oct. 91, p656-677.

Vegetated Submerged Beds with Artificial Substrates. II: N and P Removal, Peter S. Burgoon, K. R. Reddy, Thomas A. DeBusk and Ben Koopman, EE July/Aug. 91, p408-424.

Spherical shells

Calculation of Effectiveness Factors for Spherical Shells Using Shooting Technique, C. M. Wang, S. L. Ong and K. K. Ang, EE Nov./Dec. 91, p859-864.

Stability

Modified Solution of Homogeneous Surface Diffusion Model for Adsorption, Edward H. Smith, EE May/June 91, p320-338.

Steady state

Steady-State Analysis for Biological Treatment of Inhibitory Substrates, Say Kee Ong and Alan R. Bowers, EE Nov./Dec. 90, p1013-1028.

Steady state models

Limestone Contactors: Steady-State Design Relationships, Raymond D. Letterman, Marwan Hadad and Charles T. Driscoll, EE May/June 91, p339-358.

Stratified flow

Quasi-Two-Dimensional Reservoir Simulation Model, Graeme C. Hocking and John C. Patterson, EE Sept./Oct. 91, p595-613.

Streams

Delta Method for Estimating Primary Production, Respiration, and Reaeration in Streams, Steven C. Chapra and Dominic M. Di Toro, EE Sept./Oct. 91, p640-655.

Measurement of Reaeration in Streams: Comparison of Techniques, J. R. Bicudo and A. James, EE Sept./Oct. 89, p992-1010.

Striped bass

Model of Fate and Accumulation of PCB Homologues in Hudson Estuary, Robert V. Thomann, John A. Mueller, Richard P. Winfield and Chi-Rong Huang, EE Mar./Apr. 91, p161-178.

Substrates

Enhanced In-Situ Biodegradation and Aquifer Permeability Reduction, Stewart W. Taylor and Peter R. Jaffé, EE Jan./Feb. 91, p25-46.

Steady-State Analysis for Biological Treatment of Inhibitory Substrates, Say Kee Ong and Alan R. Bowers, EE Nov./Dec. 90, p1013-1028.

Vegetated Submerged Beds with Artificial Substrates. I: BOD Removal, Peter S. Burgoon, Thomas A. DeBusk, K. R. Reddy and Ben Koopman, EE July/Aug. 91, p394-407.

Sulfides

Microbial Ecology of Crown Corrosion in Sewers, Robert L. Islander, Joseph S. Devinny, Florian Mansfeld, Adam Postyn and Hong Shih, EE Nov./Dec. 91, p751-770.

Surface tension

Dynamic Surface Tension Effects on Oxygen Transfer, Gail K. Masutani and Michael K. Stenstrom, EE Jan./Feb. 91, p126-142.

Surface waters

Acidification Potential of Snowpack in Sierra Nevada, Carl W. Chen, Luis E. Gomez and Lanny J. Lund, EE July/Aug. 91, p472-486.

Surface-active agents

Dynamic Surface Tension Effects on Oxygen Transfer, Gail K. Masutani and Michael K. Stenstrom, EE Jan./Feb. 91, p126-142.

Surveys, data collection

Industrial-Waste Land Treatment Practices, Dante J. Tedaldi and Raymond C. Loehr, EE Nov./Dec. 91, p846-851.

Suspended sediments

Colloid Filtration in Fluidized Beds, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p299-313.

Colloid Removal in Fluidized-Bed Biofilm Reactor, George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p314-329.

System analysis

Wastewater Treatment Optimization Model for Developing World. I: Model Development, K. V. Ellis and S. L. Tang, EE July/Aug. 91, p501-518.

Technology

Evaluation of BAT for VOCs in Drinking Water, Robert M. Clark and Jeffrey Q. Adams, EE Mar./Apr. 91, p247-268.

Wastewater Treatment Optimization Model for Developing World. I: Model Development, K. V. Ellis and S. L. Tang, EE July/Aug. 91, p501-518.

Tracers

Investigation of Beach Contamination Using Tracer, Carl W. Chen, Luis E. Gomez, Ching L. Chen and D. Bruce Jacobsen, EE Jan./Feb. 91, p101-115.

Traffic congestion

Prediction of CO Level Near Vehicular Tunnel with Waiting Queue, W. K. Chow, EE Jan./Feb. 91, p116-125.

Transformations

Estimating Biotransformation Rate Constants for Sequential Reductive Dehalogenation Reactions, M. Yavuz Corapcioglu and M. Akhter Hossain, EE Sept./Oct. 91, p631-639.

Methanogenic Biotransformation of Chlorinated Hydrocarbons in Ground Water, M. Yavuz Corapcioglu, M. Akhter Hossain and M. Akram Hossain, EE Jan./Feb. 91, p47-65.

Transport phenomena

Enhanced In-Situ Biodegradation and Aquifer Permeability Reduction, Stewart W. Taylor and Peter R. Jaffé, EE Jan./Feb. 91, p25-46.

Model Parameter Estimation for Particle Transport, Andrew N. Ernest, James S. Bonner and Robin L. Autenrieth, EE Sept./Oct. 91, p573-594.

Transport rate

Modeling Solute Transport by Centrifugation, Jay A. Celorie, Ted S. Vinson, Sandra L. Woods and Jonathan D. Istok, EE May/June 89, p513-526.

Trends

Forecasting of Dissolved Oxygen in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu and Y. K. Cheung, EE Nov./Dec. 91, p816-833.

Trickling filters

Electricity Use in Small Wastewater Treatment Plants, Dirk F. Young and Ben Koopman, EE May/June 91, p300-307.

Tunnels

Prediction of CO Level Near Vehicular Tunnel with Waiting Queue, W. K. Chow, EE Jan./Feb. 91, p116-125.

Turbidity

Chemical Dosing of Small Water Utilities Using Regression Analysis, Glenn W. Ellis, Anthony G. Collins, Xi Ge and Catherine R. Ford, EE May/June 91, p308-319.

Turbulence

Turbulence Intensity of Mixing in Relation to Flocculation, Gordon L. McConnachie, EE Nov./Dec. 91, p731-750.

Two-dimensional models

Quasi-Two-Dimensional Reservoir Simulation Model, Graeme C. Hocking and John C. Patterson, EE Sept./Oct. 91, p595-613.

Uncertainty analysis

Fuzzy Decision Making in Dredged-Material Management, Yong W. Lee, Istvan Bogardi and John Stansbury, EE Sept./Oct. 91, p614-630.

Robust Optimal Design for Wastewater Treatment. Part I: General Approach, James G. Uber, E. Downey Brill, Jr. and John T. Pfeffer, EE July/Aug. 91, p425-437.

Robust Optimal Design for Wastewater Treatment. Part II: Application, James G. Uber, John T. Pfeffer and E. Downey Brill, Jr., EE July/Aug. 91, p438-456.

Volatile organic chemicals

Evaluation of BAT for VOCs in Drinking Water, Robert M. Clark and Jeffrey Q. Adams, EE Mar./Apr. 91, p247-268.

Evaluation of Cascade Air Stripping—Pilot-Scale and Prototype Studies, N. Nirmalakhandan, Won Jang and Richard E. Speece, EE Nov./Dec. 91, p788-798.

Volatilization

Elution Profiles of Three Chlorinated Hydrocarbons Leaching Through Sandy Soil, Barbara A. Bates, Gary R. Brenniman, Robert J. Allen and Robert J. Anderson, EE May/June 91, p279-290.

Indexing Gas Transfer in Self-Aerated Flows, John S. Gulliver, John R. Thene and Alan J. Rindels, EE May/June 90, p503-523.

Toxicant-Loading Concept for Organic Contaminants in Lakes, Steven C. Chapra, EE Sept./Oct. 91, p656-677.

Waste management

Industrial-Waste Land Treatment Practices, Dante J. Tedaldi and Raymond C. Loehr, EE Nov./Dec. 91, p846-851.

Waste utilization

Engineering Properties of Incinerator Residue, Joo-Hwa Tay and Anthony T. C. Goh, EE Mar./Apr. 91, p224-235.

Properties of Cement Made from Sludge, Joo-Hwa Tay and Kuan-Yeow Show, EE Mar./Apr. 91, p236-246.

Wasteload allocation

Reaeration Equations and Waste-Load Allocations, John L. Mancini, EE Mar./Apr. 91, p270-272.

Wastewater

Industrial-Waste Land Treatment Practices, Dante J. Tedaldi and Raymond C. Loehr, EE Nov./Dec. 91, p846-851.

Wastewater treatment

Aerobic Biological Regeneration of Dichloromethane-Loaded Activated Carbon, Joachim Holst, Burkhard Martens, Holger Gulyas, Norbert Greiser and Ivan Sekoulov, EE Mar./Apr. 91, p194-208.

Clarifier-Sludge-Blanket Behavior at Industrial Activated-Sludge Plant, Blaine F. Severin, EE Nov./Dec. 91, p718-730.

Dynamic Surface Tension Effects on Oxygen Transfer, Gail K. Masutani and Michael K. Stenstrom, EE Jan./Feb. 91, p126-142.

Electricity Use in Small Wastewater Treatment Plants, Dirk F. Young and Ben Koopman, EE May/June 91, p300-307.

Model Study of Jet-Circulated Grit Chamber, Asher Brenner and Mordechai H. Diskin, EE Nov./Dec. 91, p782-787.

Preliminary Optimal Design Model for Wastewater Treatment Plant, Okitsugu Fujiwara, EE Jan./Feb. 90, p206-210.

Robust Optimal Design for Wastewater Treatment. Part I: General Approach, James G. Uber, E. Downey Brill, Jr. and John T. Pfeffer, EE July/Aug. 91, p425-437.

Robust Optimal Design for Wastewater Treatment. Part II: Application, James G. Uber, John T. Pfeffer and E. Downey Brill, Jr., EE July/Aug. 91, p438-456.

Vegetated Submerged Beds with Artificial Substrates. I: BOD Removal, Peter S. Burgoon, Thomas A. DeBusk, K. R. Reddy and Ben Koopman, EE July/Aug. 91, p394-407.

Vegetated Submerged Beds with Artificial Substrates. II: N and P Removal, Peter S. Burgoon, K. R. Reddy, Thomas A. DeBusk and Ben Koopman, EE July/Aug. 91, p408-424.

Wastewater Treatment Optimization Model for Developing World. I: Model Development, K. V. Ellis and S. L. Tang, EE July/Aug. 91, p501-518.

Water jets

Model Study of Jet-Circulated Grit Chamber, Asher Brenner and Mordechai H. Diskin, EE Nov./Dec. 91, p782-787.

Water pollution

Toxicant-Loading Concept for Organic Contaminants in Lakes, Steven C. Chapra, EE Sept./Oct. 91, p656-677.

Water pollution control

Evaluation of BAT for VOCs in Drinking Water, Robert M. Clark and Jeffrey Q. Adams, EE Mar./Apr. 91, p247-268.

Water quality

Delta Method for Estimating Primary Production, Respiration, and Reaeration in Streams, Steven C. Chapra and Dominic M. Di Toro, EE Sept./Oct. 91, p640-655.

Dissolved Oxygen Variations in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu, Y. K. Cheung and P. P. S. Wong, EE Nov./Dec. 91, p799-815.

Estimating Biotransformation Rate Constants for Sequential Reductive Dehalogenation Reactions, M. Yavuz Corapcioglu and M. Akhter Hossain, EE Sept./Oct. 91, p631-639.

Forecasting of Dissolved Oxygen in Marine Fish Culture Zone, J. H. W. Lee, R. S. S. Wu and Y. K. Cheung, EE Nov./Dec. 91, p816-833.

GAC Adsorber Design for Removal of Chlorinated Pesticides, Massoud Pirbazari, Badri N. Badriyha and Richard J. Miltner, EE Jan./Feb. 91, p80-100.

Influence of Waves on Air-Water Gas Transfer, Ekaterini I. Daniil and John S. Gulliver, EE Sept./Oct. 91, p522-540.

Light-Scatter Particle Counting: Improving Filtered-Water Quality, Carrie M. Lewis and David H. Manz, EE Mar./Apr. 91, p209-223.

Model of Fate and Accumulation of PCB Homologues in Hudson Estuary, Robert V. Thomann, John A. Mueller, Richard P. Winfield and Chi-Rong Huang, EE Mar./Apr. 91, p161-178.

Preliminary Optimal Design Model for Wastewater Treatment Plant, Okitsugu Fujiwara, EE Jan./Feb. 90, p206-210.

Toxicant-Loading Concept for Organic Contaminants in Lakes, Steven C. Chapra, EE Sept./Oct. 91, p656-677.

Water-Quality Impact Assessment for Hydropower, Ekaterini I. Daniil, John Gulliver and John R. Thene, EE Mar./Apr. 91, p179-193.

Water speed

Model Study of Jet-Circulated Grit Chamber, Asher Brenner and Mordechai H. Diskin, EE Nov./Dec. 91, p782-787.

Water supply systems

Limestone Contactors: Steady-State Design Relationships, Raymond D. Letterman, Marwan Hadad and Charles T. Driscoll, EE May/June 91, p339-358.

Water treatment

Chemical Dosing of Small Water Utilities Using Regression Analysis, Glenn W. Ellis, Anthony G. Collins, Xi Ge and Catherine R. Ford, EE May/June 91, p308-319.

Evaluation of BAT for VOCs in Drinking Water, Robert M. Clark and Jeffrey Q. Adams, EE Mar./Apr. 91, p247-268.

Evaluation of Cascade Air Stripping—Pilot-Scale and Prototype Studies, N. Nirmalakhandan, Won Jang and Richard E. Speece, EE Nov./Dec. 91, p788-798.

Kinetics of Manganese(II) Oxidation with Chlorine, Oliver J. Hao, Allen P. Davis and Peter H. Chang, EE May/June 91, p359-374.

Light-Scatter Particle Counting: Improving Filtered-Water Quality, Carrie M. Lewis and David H. Manz, EE Mar./Apr. 91, p209-223.

Limestone Contactors: Steady-State Design Relationships, Raymond D. Letterman, Marwan Hadad and Charles T. Driscoll, EE May/June 91, p339-358.

Turbulence Intensity of Mixing in Relation to Flocculation, Gordon L. McConnachie, EE Nov./Dec. 91, p731-750.

Water treatment plants

Electricity Use in Small Wastewater Treatment Plants, Dirk F. Young and Ben Koopman, EE May/June 91, p300-307.

Water waves

Influence of Waves on Air-Water Gas Transfer, Ekaterini I. Daniil and John S. Gulliver, EE Sept./Oct. 91, p522-540.

Wetlands

Vegetated Submerged Beds with Artificial Substrates. I: BOD Removal, Peter S. Burgoon, Thomas A. DeBusk, K. R. Reddy and Ben Koopman, EE July/Aug. 91, p394-407.

Vegetated Submerged Beds with Artificial Substrates. II: N and P Removal, Peter S. Burgoon, K. R. Reddy, Thomas A. DeBusk and Ben Koopman, EE July/Aug. 91, p408-424.

Wisconsin

Loss of PCBs from Municipal-Sludge–Treated Farmland, P. Mac Berthouex and D. Robert Gan, EE Jan./Feb. 91, p5-24.

AUTHOR INDEX

Abu-Gharaiah, Ziad H.
see Khan, M. Z. Ali, EE May/June 91, p376-380

Adams, Jeffrey Q.
see Clark, Robert M., EE Mar./Apr. 91, p247-268

Allen, Robert J.
see Bates, Barbara A., EE May/June 91, p279-290

Anderson, Robert J.
see Bates, Barbara A., EE May/June 91, p279-290

Ang, K. K.
see Wang, C. M., EE Nov./Dec. 91, p859-864

Autenrieth, Robin L.
see Ernest, Andrew N., EE Sept./Oct. 91, p573-594

Badriyha, Badri N.
see Pirbazari, Massoud, EE Jan./Feb. 91, p80-100

Basagoiti, Javier
see Huang, Jerry Y. C., EE Jan./Feb. 89, p3-19

Bates, Barbara A.
Elution Profiles of Three Chlorinated Hydrocarbons Leaching Through Sandy Soil, with Gary R. Brenniman, Robert J. Allen and Robert J. Anderson, EE May/June 91, p279-290

Belanger, T. V.
Critique of Floating-Dome Technique for Estimating Reaeration Rates, with E. A. Korzun, EE Jan./Feb. 91, p144-150

Berthouex, P. Mac
Loss of PCBs from Municipal-Sludge–Treated Farmland, with D. Robert Gan, EE Jan./Feb. 91, p5-24

Bicudo, J. R.
Measurement of Reaeration in Streams: Comparison of Techniques, with A. James, EE Sept./Oct. 89, p992-1010
disc: John S. Gulliver, EE Sept./Oct. 91, p698-700
clo: EE Sept./Oct. 91, p700-701

Bogardi, Istvan
see Lee, Yong W., EE Sept./Oct. 91, p614-630

Bonner, James S.
see Ernest, Andrew N., EE Sept./Oct. 91, p573-594

Bowers, Alan R.
see Ong, Say Kee, EE Nov./Dec. 90, p1013-1028

Bownds, John M.
see Railsback, Steven F., (disc), EE May/June 90, p503-523

Brenner, Asher
Model Study of Jet-Circulated Grit Chamber, with Mordechai H. Diskin, EE Nov./Dec. 91, p782-787

Brenniman, Gary R.
see Bates, Barbara A., EE May/June 91, p279-290

Brill, E. Downey, Jr.
see Uber, James G., EE July/Aug. 91, p425-437
see Uber, James G., EE July/Aug. 91, p438-456

Burgoon, Peter S.
Vegetated Submerged Beds with Artificial Substrates. 1: BOD Removal, with Thomas A. DeBusk, K. R. Reddy and Ben Koopman, EE July/Aug. 91, p394-407
Vegetated Submerged Beds with Artificial Substrates. II: N and P Removal, with K. R. Reddy, Thomas A. DeBusk and Ben Koopman, EE July/Aug. 91, p408-424

Catalan, Lionel
Internal-Wave Action in Gravity Clarifier, with Eva Ulrich, Robert R. Hudgins and Peter L. Silveston, EE July/Aug. 91, p457-471

Celorie, Jay A.
Modeling Solute Transport by Centrifugation, with Ted S. Vinson, Sandra L. Woods and Jonathan D. Istok, EE May/June 89, p513-526
disc: Namunu J. Meegoda and George Chang, EE May/June 91, p388-389

Chang, George
see Meegoda, Namunu J., (disc), EE May/June 89, p513-526

Chang, Peter H.
see Hao, Oliver J., EE May/June 91, p359-374

Chapra, Steven C.
Delta Method for Estimating Primary Production, Respiration, and Reaeration in Streams, with Dominic M. Di Toro, EE Sept./Oct. 91, p640-655
Toxicant-Loading Concept for Organic Contaminants in Lakes, EE Sept./Oct. 91, p656-677

Chen, Carl W.
Acidification Potential of Snowpack in Sierra Nevada, with Luis E. Gomez and Lanny J. Lund, EE July/Aug. 91, p472-486
Investigation of Beach Contamination Using Tracer, with Luis E. Gomez, Ching L. Chen and D. Bruce Jacobsen, EE Jan./Feb. 91, p101-115

Chen, Ching L.
see Chen, Carl W., EE Jan./Feb. 91, p101-115

Cheung, Y. K.
see Lee, J. H. W., EE Nov./Dec. 91, p799-815
see Lee, J. H. W., EE Nov./Dec. 91, p816-833

Chow, W. K.
Prediction of CO Level Near Vehicular Tunnel with Waiting Queue, EE Jan./Feb. 91, p116-125

Clark, Robert M.
Evaluation of BAT for VOCs in Drinking Water, with Jeffrey Q. Adams, EE Mar./Apr. 91, p247-268

Closmann, Frederick B.
see Speitel, Gerald E., Jr., EE Sept./Oct. 91, p541-558

Cohn, Louis F.
see Harris, Roswell A., EE Sept./Oct. 91, p680-685

Collins, Anthony G.
see Ellis, Glenn W., EE May/June 91, p308-319

Corapcioglu, M. Yavuz
Estimating Biotransformation Rate Constants for Sequential Reductive Dehalogenation Reactions, with M. Akhter Hossain, EE Sept./Oct. 91, p631-639
Methanogenic Biotransformation of Chlorinated Hydrocarbons in Ground Water, with M. Akhter Hossain and M. Akram Hossain, EE Jan./Feb. 91, p47-65

Daniil, Ekaterini I.
Influence of Waves on Air-Water Gas Transfer, with John S. Gulliver, EE Sept./Oct. 91, p522-540
Water-Quality Impact Assessment for Hydropower, with John Gulliver and John R. Thene, EE Mar./Apr. 91, p179-193

Davis, Allen P.
see Hao, Oliver J., EE May/June 91, p359-374

DeBusk, Thomas A.
see Burgoon, Peter S., EE July/Aug. 91, p394-407
see Burgoon, Peter S., EE July/Aug. 91, p408-424

Devinny, Joseph S.
see Islander, Robert L., EE Nov./Dec. 91, p751-770

Di Toro, Dominic M.
see Chapra, Steven C., EE Sept./Oct. 91, p640-655

Dick, Richard I.
disc. (of Analytical Approach for Evaluation of Settling Column Data, by Hasan Ali San, EE Mar./Apr. 89, p455-461), EE Jan./Feb. 91, p152-153

Diskin, Mordechai H.
see Brenner, Asher, EE Nov./Dec. 91, p782-787

Draper, Cynthia E.
see Regan, Raymond W., Sr., EE Sept./Oct. 91, p559-572

Driscoll, Charles T.
see Letterman, Raymond D., EE May/June 91, p339-358

Elimelech, Menachem
disc. (of Colloid Filtration in Fluidized Beds, by George Sprouse and Bruce E. Rittmann, EE Mar./Apr. 90, p299-313), EE Sept./Oct. 91, p706-708

Ellis, Glenn W.
Chemical Dosing of Small Water Utilities Using Regression Analysis, with Anthony G. Collins, Xi Ge and Catherine R. Ford, EE May/June 91, p308-319

Ellis, K. V.
Wastewater Treatment Optimization Model for Developing World. I: Model Development, with S. L. Tang, EE July/Aug. 91, p501-518

Ernest, Andrew N.
Model Parameter Estimation for Particle Transport, with James S. Bonner and Robin L. Autenrieth, EE Sept./Oct. 91, p573-594

Fitzpatrick, C. S. B.
disc. (of Effect of Solids Property on Rates of Solids Dislodgment, by Jerry Y. C. Huang and Javier Basagoiti, EE Jan./Feb. 89, p3-19), EE Mar./Apr. 91, p274

Ford, Catherine R.
see Ellis, Glenn W., EE May/June 91, p308-319

Fujiwara, Okitsugu
Preliminary Optimal Design Model for Wastewater Treatment Plant, EE Jan./Feb. 90, p206-210
disc: Thomas M. Walski, EE Sept./Oct. 91, p702-704
clo: EE Sept./Oct. 91, p704-706

Gabbard, H. David
see Wang, Yi-Tin, EE July/Aug. 91, p487-500

Gan, D. Robert
see Berthouex, P. Mac, EE Jan./Feb. 91, p5-24

Ge, Xi
see Ellis, Glenn W., EE May/June 91, p308-319

Goh, Anthony T. C.
see Tay, Joo-Hwa, EE Mar./Apr. 91, p224-235

Gomez, Luis E.
see Chen, Carl W., EE Jan./Feb. 91, p101-115
see Chen, Carl W., EE July/Aug. 91, p472-486

Greiser, Norbert
see Holst, Joachim, EE Mar./Apr. 91, p194-208

Gulliver, John
see Daniil, Ekaterini I., EE Mar./Apr. 91, p179-193

Gulliver, John S.
Indexing Gas Transfer in Self-Aerated Flows, with John R. Thene and Alan J. Rindels, EE May/June 90, p503-523
disc: Steven F. Railsback and John M. Bownds, EE Nov./Dec. 91, p866-867
clo: EE Nov./Dec. 91, p867-869
disc. (of Measurement of Reaeration in Streams: Comparison of Techniques, by J. R. Bicudo and A. James, EE Sept./Oct. 89, p992-1010), EE Sept./Oct. 91, p698-700
see Daniil, Ekaterini I., EE Sept./Oct. 91, p522-540

Gulyas, Holger
see Holst, Joachim, EE Mar./Apr. 91, p194-208

Gupta, N.
see Wickramanayake, G. B., EE Sept./Oct. 91, p686-691

Hadad, Marwan
see Letterman, Raymond D., EE May/June 91, p339-358

Hao, Oliver J.
Kinetics of Manganese(II) Oxidation with Chlorine, with Allen P. Davis and Peter H. Chang, EE May/June 91, p359-374

Harris, Keith
see Robinson, R. Bruce, EE Nov./Dec. 91, p852-858

Harris, Roswell A.
Controlling Sewage Treatment Plant Noise, with Louis F. Cohn, EE Sept./Oct. 91, p680-685

Hinchee, R. E.
see Wickramanayake, G. B., EE Sept./Oct. 91, p686-691

Hocking, Graeme C.
Quasi-Two-Dimensional Reservoir Simulation Model, with John C. Patterson, EE Sept./Oct. 91, p595-613

Holst, Joachim
Aerobic Biological Regeneration of Dichloromethane-Loaded Activated Carbon, with Burkhard Martens, Holger Gulyas, Norbert Greiser and Ivan Sekoulov, EE Mar./Apr. 91, p194-208

Hossain, M. Akhter
see Corapcioglu, M. Yavuz, EE Jan./Feb. 91, p47-65
see Corapcioglu, M. Yavuz, EE Sept./Oct. 91, p631-639

Hossain, M. Akram
see Corapcioglu, M. Yavuz, EE Jan./Feb. 91, p47-65

Huang, Chi-Rong
see Thomann, Robert V., EE Mar./Apr. 91, p161-178

Huang, Jerry Y. C.
Effect of Solids Property on Rates of Solids Dislodgment, with Javier Basagoiti, EE Jan./Feb. 89, p3-19
disc: C. S. B. Fitzpatrick, EE Mar./Apr. 91, p274

Hudgins, Robert R.
see Catalan, Lionel, EE July/Aug. 91, p457-471

Islander, Robert L.
Microbial Ecology of Crown Corrosion in Sewers, with Joseph S. Devinny, Florian Mansfeld, Adam Postyn and Hong Shih, EE Nov./Dec. 91, p751-770

Istok, Jonathan D.
see Celorie, Jay A., EE May/June 89, p513-526

Jacobsen, D. Bruce
see Chen, Carl W., EE Jan./Feb. 91, p101-115

Jaffé, Peter R.
see Taylor, Stewart W., EE Jan./Feb. 91, p25-46

James, A.
see Bicudo, J. R., EE Sept./Oct. 89, p992-1010

Jang, Won
see Nirmalakhandan, N., EE Nov./Dec. 91, p788-798

Khan, M. Z. Ali
New Approach for Estimating Energy Content of Municipal Solid Waste, with Ziad H. Abu-Gharara, EE May/June 91, p376-380

Koopman, Ben
see Burgoon, Peter S., EE July/Aug. 91, p394-407
see Burgoon, Peter S., EE July/Aug. 91, p408-424
see Young, Dirk F., EE May/June 91, p300-307

Korzun, E. A.
see Belanger, T. V., EE Jan./Feb. 91, p144-150

Lee, J. H. W.
Dissolved Oxygen Variations in Marine Fish Culture Zone, with R. S. S. Wu, Y. K. Cheung and P. P. S. Wong, EE Nov./Dec. 91, p799-815
Forecasting of Dissolved Oxygen in Marine Fish Culture Zone, with R. S. S. Wu and Y. K. Cheung, EE Nov./Dec. 91, p816-833

Lee, Yong W.
Fuzzy Decision Making in Dredged-Material Management, with Istvan Bogardi and John Stansbury, EE Sept./Oct. 91, p614-630

Letterman, Raymond D.
Limestone Contactors: Steady-State Design Relationships, with Marwan Hadad and Charles T. Driscoll, EE May/June 91, p339-358

Leu, Rong-jin
see Regan, Raymond W., Sr., EE Sept./Oct. 91, p559-572

Lewis, Carrie M.
Light-Scatter Particle Counting: Improving Filtered-Water Quality, with David H. Manz, EE Mar./Apr. 91, p209-223

Llorens, M.
Primary Productivity in Sewage Pond: Semiempirical Model, with J. Sáez and A. Soler, EE Nov./Dec. 91, p771-781

Loehr, Raymond C.
see Martin, John H., Jr., EE May/June 91, p291-299
see Tedaldi, Dante J., EE Nov./Dec. 91, p846-851

Lund, Lanny J.
see Chen, Carl W., EE July/Aug. 91, p472-486

Mancini, John L.
Reaeration Equations and Waste-Load Allocations, EE Mar./Apr. 91, p270-272

Mansfeld, Florian
see Islander, Robert L., EE Nov./Dec. 91, p751-770

Manz, David H.
see Lewis, Carrie M., EE Mar./Apr. 91, p209-223

Martens, Burkhard
see Holst, Joachim, EE Mar./Apr. 91, p194-208

Martin, David
see Robinson, R. Bruce, EE Nov./Dec. 91, p852-858

Martin, John H., Jr.
Estimating Oil and Grease Content of Petroleum-Contaminated Soil, with Amy J. Siebert and Raymond C. Loehr, EE May/June 91, p291-299

Masutani, Gail K.
Dynamic Surface Tension Effects on Oxygen Transfer, with Michael K. Stenstrom, EE Jan./Feb. 91, p126-142

McConnachie, Gordon L.
Turbulence Intensity of Mixing in Relation to Flocculation, EE Nov./Dec. 91, p731-750

Meegoda, Namunu J.
disc. (of Modeling Solute Transport by Centrifugation, by Jay A. Celorie, Ted S. Vinson, Sandra L. Woods and Jonathan D. Istok, EE May/June 89, p513-526) with George Chang, EE May/June 91, p388-389

Miltner, Richard J.
see Pirbazari, Massoud, EE Jan./Feb. 91, p80-100

Mueller, John A.
see Thomann, Robert V., EE Mar./Apr. 91, p161-178

Nielsen, B. J.
see Wickramanayake, G. B., EE Sept./Oct. 91, p686-691

Nirmalakhandan, N.
Evaluation of Cascade Air Stripping—Pilot-Scale and Prototype Studies, with Won Jang and Richard E. Speece, EE Nov./Dec. 91, p788-798

Ong, S. L.
see Wang, C. M., EE Nov./Dec. 91, p859-864

Ong, Say Kee
Steady-State Analysis for Biological Treatment of Inhibitory Substrates, with Alan R. Bowers, EE Nov./Dec. 90, p1013-1028
err: EE Sept./Oct. 91, p714

Pai, Pin-Chieh
see Wang, Yi-Tin, EE July/Aug. 91, p487-500

Patterson, John C.
see Hocking, Graeme C., EE Sept./Oct. 91, p595-613

Pfeffer, John T.
see Uber, James G., EE July/Aug. 91, p425-437
see Uber, James G., EE July/Aug. 91, p438-456

Pirbazari, Massoud
GAC Adsorber Design for Removal of Chlorinated Pesticides, with Badri N. Badriyha and Richard J. Miltner, EE Jan./Feb. 91, p80-100
err: EE Sept./Oct. 91, p713

Postya, Adam
see Islander, Robert L., EE Nov./Dec. 91, p751-770

Railsback, Steven F.
disc. (of Indexing Gas Transfer in Self-Aerated Flows, by John S. Gulliver, John R. Thene and Alan J. Rindels, EE May/June 90, p503-523) with John M. Bownds, EE Nov./Dec. 91, p866-867

Reddy, K. R.
see Burgoon, Peter S., EE July/Aug. 91, p394-407
see Burgoon, Peter S., EE July/Aug. 91, p408-424

Regan, Raymond W., Sr.
Permeable Treatment Beds for Plating Sludge Disposal, with Cynthia E. Draper and Rong-jin Leu, EE Sept./Oct. 91, p559-572

Rindels, Alan J.
see Gulliver, John S., EE May/June 90, p503-523

Rittmann, Bruce E.
Effect of Biofilm Accumulation on Colloid Cohesion, with Steven A. Wirtel, EE Sept./Oct. 91, p692-695
see Sprouse, George, EE Mar./Apr. 90, p299-313
see Sprouse, George, EE Mar./Apr. 90, p314-329

Robbins, Robert
see Robinson, R. Bruce, EE Nov./Dec. 91, p852-858

Robinson, R. Bruce
Dynamic Model of Pump Station, with Robert Robbins, David Martin and Keith Harris, EE Nov./Dec. 91, p852-858

Sáez, J.
see Llorens, M., EE Nov./Dec. 91, p771-781

San, Hasan Ali
Analytical Approach for Evaluation of Settling Column Data, EE Mar./Apr. 89, p455-461
disc: Richard I. Dick, EE Jan./Feb. 91, p152-153
clo: EE Jan./Feb. 91, p153-155

Sekoulov, Ivan
see Holst, Joachim, EE Mar./Apr. 91, p194-208

Severin, Blaine F.
Clarifier-Sludge-Blanket Behavior at Industrial Activated-Sludge Plant, EE Nov./Dec. 91, p718-730

Shields, F. Douglas, Jr.
Designing Treatment Basin Dimensions to Reduce Cost, with Edward L. Thackston, EE May/June 91, p381-386

Shih, Hong
see Islander, Robert L., EE Nov./Dec. 91, p751-770

Show, Kuan-Yeow
see Tay, Joo-Hwa, EE Mar./Apr. 91, p236-246
see Tay, Joo-Hwa, EE Nov./Dec. 91, p834-844

Siebert, Amy J.
see Martin, John H., Jr., EE May/June 91, p291-299

Silveston, Peter L.
see Catalan, Lionel, EE July/Aug. 91, p457-471

Smith, Edward H.
Modified Solution of Homogeneous Surface Diffusion Model for Adsorption, EE May/June 91, p320-338

Soler, A.
see Llorens, M., EE Nov./Dec. 91, p771-781

Speece, Richard E.
see Nirmalakhandan, N., EE Nov./Dec. 91, p788-798

Speitel, Gerald E., Jr.
Chlorinated Solvent Biodegradation by Methanotrophs in Unsaturated Soils, with Frederick B. Closmann, EE Sept./Oct. 91, p541-558

Speth, Thomas F.
Evaluating Capacities of GAC Preloaded with Natural Water, EE Jan./Feb. 91, p66-79

Sprouse, George
Colloid Filtration in Fluidized Beds, with Bruce E. Rittmann, EE Mar./Apr. 90, p299-313
disc: Menachem Elimelech, EE Sept./Oct. 91, p706-708
clo: EE Sept./Oct. 91, p708-711
Colloid Removal in Fluidized-Bed Biofilm Reactor, with Bruce E. Rittmann, EE Mar./Apr. 90, p314-329
err: EE Mar./Apr. 91, p275-276

Stansbury, John
see Lee, Yong W., EE Sept./Oct. 91, p614-630

Stenstrom, Michael K.
see Masutani, Gail K., EE Jan./Feb. 91, p126-142

Tang, S. L.
see Ellis, K. V., EE July/Aug. 91, p501-518

Tay, Joo-Hwa
Clay-Blended Sludge as Lightweight Aggregate Concrete Material, with Woon-Kwong Yip and Kuan-Yeow Show, EE Nov./Dec. 91, p834-844

Engineering Properties of Incinerator Residue, with Anthony T. C. Goh, EE Mar./Apr. 91, p224-235
Properties of Cement Made from Sludge, with Kuan-Yeow Show, EE Mar./Apr. 91, p236-246

Taylor, Stewart W.
Enhanced In-Situ Biodegradation and Aquifer Permeability Reduction, with Peter R. Jaffé, EE Jan./Feb. 91, p25-46

Tedaldi, Dante J.
Industrial-Waste Land Treatment Practices, with Raymond C. Loehr, EE Nov./Dec. 91, p846-851

Thackston, Edward L.
see Shields, F. Douglas, Jr., EE May/June 91, p381-386

Thene, John R.
see Daniil, Ekaterini I., EE Mar./Apr. 91, p179-193
see Gulliver, John S., EE May/June 90, p503-523

Thomann, Robert V.
Model of Fate and Accumulation of PCB Homologues in Hudson Estuary, with John A. Mueller, Richard P. Winfield and Chi-Rong Huang, EE Mar./Apr. 91, p161-178

Uber, James G.
Robust Optimal Design for Wastewater Treatment. Part I: General Approach, with E. Downey Brill, Jr. and John T. Pfeffer, EE July/Aug. 91, p425-437
Robust Optimal Design for Wastewater Treatment. Part II: Application, with John T. Pfeffer and E. Downey Brill, Jr., EE July/Aug. 91, p438-456

Ulrich, Eva
see Catalan, Lionel, EE July/Aug. 91, p457-471

Vinson, Ted S.
see Celorie, Jay A., EE May/June 89, p513-526

Walski, Thomas M.
disc. (of Preliminary Optimal Design Model for Wastewater Treatment Plant, by Okitsugu Fujiwara, EE Jan./Feb. 90, p206-210), EE Sept./Oct. 91, p702-704

Wang, C. M.
Calculation of Effectiveness Factors for Spherical Shells Using Shooting Technique, with S. L. Ong and K. K. Ang, EE Nov./Dec. 91, p859-864

Wang, Yi-Tin
Inhibition of Acetate Methanogenesis by Phenols, with H. David Gabbard and Pin-Chieh Pai, EE July/Aug. 91, p487-500

Wickramanayake, G. B.
Free Petroleum Hydrocarbon Volume Estimates from Monitoring Well Data, with N. Gupta, R. E. Hinchee and B. J. Nielsen, EE Sept./Oct. 91, p686-691

Winfield, Richard P.
see Thomann, Robert V., EE Mar./Apr. 91, p161-178

Wirtel, Steven A.
see Rittmann, Bruce E., EE Sept./Oct. 91, p692-695

Wong, P. P. S.
see Lee, J. H. W., EE Nov./Dec. 91, p799-815

Woods, Sandra L.
see Celorie, Jay A., EE May/June 89, p513-526

Wu, R. S. S.
see Lee, J. H. W., EE Nov./Dec. 91, p799-815
see Lee, J. H. W., EE Nov./Dec. 91, p816-833

Yip, Woon-Kwong
see Tay, Joo-Hwa, EE Nov./Dec. 91, p834-844

Young, Dirk F.
Electricity Use in Small Wastewater Treatment Plants, with Ben Koopman, EE May/June 91, p300-307